

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Currently Amended) A headlamp apparatus for a vehicle comprising:

a steering device coupled to a steering wheel; and

control means for controlling a light distribution of the headlamp based on a steering angle of the steering device, wherein the control means detects a straight steering position of the steering device from an origin position signal output by the steering device for each rotation of the steering wheel and when a difference between a left wheel speed and a right wheel speed is equal to or less than a predetermined value

wherein the steering device comprises

a rotary disk, attached to a steering shaft of the steering wheel, having a plurality of unit slits circumferentially positioned on the rotary disk and an origin slit positioned at an inside diameter of said unit slits;

at least one origin slit detector that generates the origin position signal when the origin slit passes the origin slit detector; and

at least two unit slit detectors separated at a half pitch from each other on the circumferential position of said unit slits, to generate respectively at least two pulse signals, wherein the control means controls the light distribution by adjusting the headlamp based on a degree of rotation of the steering wheel.

3. (Previously Presented) The headlamp apparatus for a vehicle according to claim 2, wherein the control means detects the straight steering position when a vehicle speed of the vehicle has at least a predetermined value.

4. (Previously Presented) The headlamp apparatus for a vehicle according to claim 2, wherein the control means detects the straight steering position and corrects the straight steering position based on at least one of an integrating time in a steering angle position and an integrated running distance.

5. (Canceled)

6. (Currently Amended) A headlamp apparatus for a vehicle, comprising:
a first speed sensor that is coupled to a first wheel and senses a first wheel speed,
and a second speed sensor that is coupled to a second wheel and senses a second wheel speed;
a steering sensor that is coupled to a steering shaft of a steering wheel for turning
the vehicle and detects a degree of rotation of the steering wheel;
a controller that controls light distribution in a headlamp and initializes a straight
position of the headlamp when the first wheel speed and the second wheel speed exceed or equal
a first threshold, and when a difference between the first wheel speed and the second wheel
speed is equal to or less than a second threshold; and
The apparatus of claim 5, further comprising:
a vehicle velocity sensor that senses a vehicle velocity, wherein the said controller
initializes the said straight position when the said vehicle velocity exceeds or equals a third
threshold.

7. (Currently Amended) The apparatus of claim 6, further comprising at least one
actuator for adjusting a position of the said headlamp in response to an output from the said
controller.

8. (Currently Amended) A headlamp apparatus for a vehicle, comprising:
a first speed sensor that is coupled to a first wheel and senses a first wheel speed,
and a second speed sensor that is coupled to a second wheel and senses a second wheel speed;
a steering sensor that is coupled to a steering shaft of a steering wheel for turning
the vehicle and detects a degree of rotation of the steering wheel;
a controller that controls light distribution in a headlamp and initializes a straight
position of the headlamp when the first wheel speed and the second wheel speed exceed or equal
a first threshold, and when a difference between the first wheel speed and the second wheel
speed is equal to or less than a second threshold;
- ~~The apparatus of claim 5, said steering sensor further comprising:~~
- a rotary disk attached to ~~the~~ said steering shaft and having a plurality of unit slits circumferentially positioned on ~~the~~ said rotary disk, and an origin slit positioned at an inside diameter of ~~the~~ said unit slits;
- at least one origin slit detector that generates an origin position signal when ~~the~~ said origin slit passes ~~the~~ said origin slit detector; and
- at least two unit slit detectors separated at a half pitch from each other on ~~the~~ said circumferential position of ~~the~~ said unit slits, to generate respectively at least two pulse signals, wherein ~~the~~ said controller controls ~~the~~ said light distribution by adjusting ~~the~~ said headlamp based on ~~the~~ said degree of rotation.

9-10. (Canceled)

11. (New) The apparatus of claim 8, further comprising at least one actuator for adjusting a position of the headlamp in response to an output from the controller.